

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A waveform monitoring apparatus, comprising:
a hydraulic cylinder, incorporated in an injection molding device for ejecting a molding material;
a sensor, generating pressure data of the hydraulic cylinder;
a determinant, forming a measured value waveform based on the pressure data, and determining that whether the pressure data exceeds a reference pressure waveform by a predetermined range; and
a marking applier, applying a marking to an excess portion of the measured value waveform determined by the determinant[.],
wherein the marking is thicker than other portions of the measured value waveform that do not exceed the reference pressure.

2. (Original) The waveform monitoring apparatus as set forth in claim 1, further comprising a display which displays the measured value waveform having the excess portion to which the marking is applied.

3. (Original) The waveform monitoring apparatus as set forth in claim 1, further comprising a sorter which sorts a product formed from the molding material,

wherein the determinant outputs a determination signal indicating whether the pressure data exceeds the reference pressure waveform by the predetermined range to the sorter.

4. (Original) The waveform monitoring apparatus as set forth in claim 1, wherein the determinant stops an injecting operation of the injection molding device when the measured value waveform in which the pressure data exceeds a reference pressure waveform by a predetermined range is continuously detected more than a predetermined times.

5. (Original) The waveform monitoring apparatus as set forth in claim 1, wherein the determinant sets a upper limit range and a lower limit range with respect to the reference pressure waveform as the predetermined range.

6. (Original) The waveform monitoring apparatus as set forth in claim 1, further comprising a storage which stores the measured value waveform to which the marking is applied.

7. (Currently Amended) A method for monitoring a waveform, comprising the steps of: generating pressure data of a hydraulic cylinder incorporated in an injection molding device for ejecting a molding material;
forming a measured value waveform based on the pressure data;

determining that whether the pressure data exceeds a reference pressure waveform by a predetermined range; and

applying a marking to an excess portion of the measured value waveform determined in the determinant step[.],

wherein the marking is thicker than other portions of the measured value waveform that do not exceed the reference pressure.

8. (Original) The method as set forth in claim 7, further comprising the step of displaying the measured value waveform having the excess portion to which the marking is applied.

9. (Original) The method as set forth in claim 7, further comprising the step of outputting a determination signal to a sorter which sorts a product formed from the molding material,

wherein the determination signal indicates that whether the pressure data exceeds the reference pressure waveform by the predetermined range.

10. (Original) The method as set forth in claim 7, further comprising the step of stopping an injecting operation of the injection molding device when the measured value waveform in which the pressure data exceeds a reference pressure waveform by a predetermined range is continuously detected more than a predetermined times.

11. (Original) The method as set forth in claim 7, wherein the predetermined range is set a upper range and a lower range with respect to the reference pressure waveform.

12. (Original) The method as set forth in claim 1, further comprising the step of storing the measured value waveform to which the marking is applied.

13. (Previously Presented) The waveform monitoring apparatus as set forth in claim 1, wherein the marking applier applies a graphical marking to the excess portion of the displayed measured value waveform determined by the determinant.

14. (Previously Presented) The method as set forth in claim 7, wherein a graphical marking is applied to the excess portion of the displayed measured value waveform determined in the determinant step.